

September 14, 2007

Mr. Rich Gannon
Division of Water Quality
1617 Mail Service Center
Raleigh, NC 27699-1617

RE: Jordan Reservoir Water Supply Nutrient Rules (15A NCAC 02B.0262-.0311)

Dear Mr. Gannon:

I submit the following comments on behalf of the North Carolina League of Municipalities, a voluntary federation representing 539 incorporated cities, towns and villages. Individual municipalities will be submitting detailed comments directed toward the specific impacts on and concerns of their jurisdictions. The League is concerned not only about the potential impact on municipalities large and small in the Jordan Lake watershed, but also the potential impacts on municipalities throughout the state that may be affected if the policy decisions in these rules become a template for regulations in other basins in the future.

The issue is not whether to do anything about Jordan Lake; rather it is what to do that will reasonably assure progress toward the goal of preserving the intended uses of the lake. This should be done in a way to avoid economic hardship and allow for the assessment of conditions for periodic corrections. DWQ staff has consistently supported, reiterating in the draft Jordan Lake TMDL, the idea of developing management strategies using “adaptive management.” The role of adaptive management in the implementation of these rules is an important one and should be emphasized in these rules.

As the Jordan Lake TMDL states, “Uncertainty does not preclude a decision to pursue a reasonable management strategy. Post-implementation monitoring of the nutrient management strategy will provide feedback for appropriate adaptive management.” This is the proper course of action, but the determination of what actions are “reasonable” is now up to the members of EMC. Answering this fundamental question requires answering these questions as well: At what point is the Lake fulfilling its use designation – when is it acceptably drinkable and swimmable? What cost is acceptable to bring the water quality parameters into compliance levels? Is it possible for a lake with this configuration and in this location to ever be in compliance and non-eutrophic? What are the conditions that would precipitate a successful recovery? What if implementing the less controversial and less expensive measures did the job?

The TMDL clearly states that “conditions in the lake appear to have improved somewhat from lake-startup until the early 1990's but have shown little change since that time.” This statement, and the less than expected nutrient over-enrichment from early predictive studies, does not portend a crisis. A deliberate management strategy should be implemented, but a wholesale change requiring billions of dollars in investment would be an exaggeration of the immediate problem.

Our thanks to the EMC Hearing Officers, Rich Gannon and other DWQ staff for their efforts in putting together well-attended public hearings and extending the public comment period to allow for additional input. We appreciate the opportunity to submit these comments, organized according to the sections of the rule.

15A NCAC 02B .0262 - WATERSHED NUTRIENT REDUCTION GOALS

Item (7) of this section (Adaptive Management) authorizes the adjustment of the loading goals only; it does not allow the flexibility necessary for adjusting practices to meet the goals. Although the adjustment of the loading goals may be necessary after determining that stringent measures have been implemented and that the goals are unable to be achieved, it is more practical and cost-effective to adjust the practices as the effects on Jordan Lake are observed over time. Such an approach would see the implementation of significant and achievable practices within the basin, and then gauge the progress being made to achieve the goals. If adequate progress is not being made, further more substantial efforts would be implemented. It is prudent to take meaningful steps to reduce nutrient inputs, but adopting measures that are more easily obtainable without resorting to the most costly control measures first would be more cost effective – and more palatable to the regulated community - than requiring all measures up front to see if they do the job.

As important as it is to be able to adjust both the loading goals and the practices as necessary, it is equally important to provide for a testing regime that can adequately gauge the progress being made. An assessment relying solely on the testing done by the Department for the basin-wide report is inadequate for meaningful adaptive management. Local and federal government data must be used as an integral part of any assessment. Local governments, especially, should be viewed as partners in the process of assessing the condition of the lake.

We recommend that this section be broadened to include an adaptive approach to the measures taken to achieve the loading goals and to recognize additional sources of data for adjustments. To that end we suggest the following changes to this section of the rule:

(7) ADAPTIVE MANAGEMENT. The initial loading goals defined in Item (3) of this Rule and/or the measures to meet these goals as established in 15A NCAC 02B .0263 through .0271 may be adjusted based on an evaluation of the effectiveness of the nutrient reduction strategy after at least five years of implementation and periodically thereafter as part of the review of the *Cape Fear River Basinwide Water Quality Plan*. The Division shall base any adjustment on the evaluation of additional water quality data collected by the department or by certified partners such as federal or local government agencies. Such evaluation shall include, but ~~shall~~ not be limited to, the results of a calibrated lake nutrient response model, trend analyses as described in the monitoring section of the *B. Everett Jordan Reservoir, North Carolina Nutrient Management Strategy and Total Maximum Daily Load*, and lake use support assessment as conducted every five years for the *Cape Fear River Basinwide Water Quality Plan*. The nutrient response modeling and monitoring on which an adjustment may be based shall meet the criteria set forth in the Clean Water Act, G.S. 143-215.1(c5), and meet or exceed criteria used by the Division for the monitoring and modeling used to establish the goals in Item (3) of this Rule. ~~Loading goals adjusted as described here shall apply to the rules identified in Item (5) of this Rule upon approval by the Commission.~~

15A NCAC 02B .0265 – STORMWATER MANAGEMENT FOR NEW DEVELOPMENT

It is generally accepted that new development within the watershed should not significantly increase nutrient inputs into Jordan Lake. The League supports measures that strengthen

stormwater controls for new development within the watershed, but we recognize that there are challenges in these rules that must be addressed. The League supports further expansion of NPDES Phase II requirements throughout the watershed, and has always supported stronger new development stormwater controls for unincorporated areas. It is new development in rapidly growing areas outside of municipal boundaries that will pose a significant challenge to improving the condition of the lake.

The timeline for implementation in Item (4) of this section is confusing, but as it is stated local governments are not given enough time to develop, adopt and implement these programs. DWQ is given one year to develop a model program. Local governments will then have only six months to submit “stormwater management programs.” The Department has a further nine months to bring these programs before the EMC for approval, after which local governments have only three months to completely adopt and begin implementation. This is already a lengthy process, but shortening it for local government plan development and implementation will not likely result in speedier improvements to Jordan Lake. In fact, it may result in an inadequately considered plan that could raise implementation costs and result in more public opposition. These plans will require the adoption of new ordinances, the addition of more staff, and budgeting more resources. These will all require extensive public input and elected body approval.

We recommend that local governments be given at least 12 months to adopt and begin implementation of their stormwater management program after the plans are approved by the EMC.

Item (3)(i) establishes nutrient reduction goals for new development that would likely require engineered solutions in most cases, but it refers to a loading calculation tool that has yet to be developed. In addition, Item (4)(a) allows DWQ one year beyond the effective date of the rule to develop this tool as well as a model program to be used by local governments to develop their stormwater management programs. As it is now, there are a number of unanswered questions regarding the details of such a local stormwater program that specifically targets nutrient reductions, and the requirements that will be imposed upon developers. This is especially problematic for those communities that have not already had the experience of planning for an NPDES Phase I or II stormwater permit. The development of a fiscal analysis for the implementation of this rule is completely undermined by doing so prior to an understanding of what it will take to implement the rule. Through a collaborative process of developing a model program, shortcomings of any proposed rule may come to light that could be modified before the process of adoption. If the process were inverted, as we suggest, local government stakeholders would likely be more amenable to the final outcome of any rulemaking process.

We recommend that greater effort and attention be given to developing a model program, calculation tools and methods, etc., before the codification and implementation of this rule.

15A NCAC 02B.0266 – STORMWATER MANAGEMENT FOR EXISTING DEVELOPMENT

The treatment of stormwater from existing development is recognized as a problem across the country, particularly the costs associated with direct engineered treatment options (retrofits). These costs have been somewhat substantiated in the fiscal note accompanying this rule which estimates annual costs throughout the watershed to be \$16.4 million and an entire

compliance cost for this one measure to be \$529 million. We believe costs will be significantly higher. Using estimates provided by the cities of Cary, Durham, Greensboro and Chapel Hill, and extrapolated for the whole basin, suggests total costs well over \$2 billion. For instance, the City of Durham estimates their costs alone for nutrient reductions from this provision of the rule to be \$334 million. This translates to \$6,750 per family. The cost calculations for each community may vary widely, but for the communities that have put time into cost estimates they all substantially exceed estimates in the fiscal note. Much of this variability may be a result of a significant number of unknowns given the absence of a model program and the lack of specificity in the requirement for a retrofit plan.

Clearly, it is this retrofit provision of the rule that is gathering headlines and contributing to a general uneasiness with the direction of this process. With adaptive management in mind, it would be more productive to defer action on this section of the rules and concentrate on developing and improving stormwater program capacity in local governments across the watershed. Retrofitting and other innovative stormwater control measures will be a natural result of improved institutional capacity of these local programs. An adaptive approach would bring in retrofitting requirements if further testing shows that improved stormwater treatment efforts and greater implementation of NPDES Phase II requirements have not had the desired effect.

As is pointed out in the fiscal note, DWQ staff worked with stakeholders to identify a large number of attainable BMPs other than retrofit solutions that could reduce nutrient input from existing developments. Many of these are likely to be implemented in the course of Phase II implementation. Despite this, DWQ staff has consistently suggested that implementation of Phase I and II requirements do not contribute to nutrient reductions. We disagree. As an example of the positive effects of Phase II, many communities, through the implementation of their new stormwater programs, are identifying streams and other water bodies within their jurisdictions that are candidates for restoration efforts. These restorations have the effect of treating existing development by mitigating sources of in-flow as a precondition for a successful project. These projects are expensive, and involve significant planning and program capacity. In addition, other measures such as illicit discharge detection, public education and involvement, and pollution prevention have the potential to significantly reduce nutrient inputs from existing development as is explicitly recognized in this section of the rule – 3(a)(v)(c), (d) and (e). The EMC itself has also recognized the nutrient reductions possible from Phase II activities by designating new Phase II communities based on nutrient impairments of receiving waters. Full implementation of Phase II requirements throughout the watershed is likely to have a positive effect on Jordan Lake but will take time to quantify as many programs are only just beginning.

We recommend that the EMC defer action on this section of the rules (02B.0266).

15A NCAC 02B.0267 – PROTECTION OF EXISTING RIPARIAN BUFFERS Many local governments in the Jordan Lake watershed implement riparian zone protections through the Water Supply Watershed Rules. Those rules, however, only cover new development within the watershed areas. What is being proposed is a requirement for full buffer protection for any land use within the entire local government jurisdiction. This should be recognized as a significant regulatory requirement. Implementation will require additional local ordinances and staffing to police and permit all uses within the prescribed fifty foot buffer area, including

such uses as forestry and agriculture. The permit process involves the determination of a number of technical site factors, procedures for a practical alternatives analysis, and an extensive variance process. It is simply unfair to put this burden on local governments within this watershed while the state administers similar programs in other river basins. This burden naturally falls to the state since they have the expertise, experience and resources for such an undertaking. During public hearings it was stated that this requirement was being imposed on local government because DWQ “can’t afford to do it anymore.” We hasten to point out that local governments within the Jordan watershed do not have access to any greater financial resources than that of the state.

This section of the rule will be equally applied to communities as large as Greensboro with a population of over 200,000 and Ossipee with a population of less than 500. Clearly the resources available to each of these will be different, and should be taken into consideration. Since the implementation of this program is likely to be difficult and expensive, the creation of a voluntary incentive-based process for local governments to take over administration of the buffer requirements is appropriate. Incentives create a cooperative approach between the state and their local government partners.

We recommend that local governments that agree to take on this permitting program would do so with the understanding that any action on the more expensive requirements for retrofitting existing development will be delayed until further assessments of the lake reveal a critical need to take further action.

Item (17)(b) allows local governments six months to develop a local program including all of the necessary local ordinances implementing the buffer protection requirements. Given that many local governments in the watershed will require significant ordinance changes and possibly staffing increases to accommodate this new program, six months is an unrealistic requirement for such an extensive programmatic change. Creating or modifying ordinances requires action by elected bodies, public input, staffing and resource changes, all of which require more time.

We recommend that local governments be given at least 12 months for implementation of this provision.

15A NCAC 02B.0268 – MITIGATION FOR RIPARIAN BUFFERS

In addition to requiring local governments to implement a comprehensive buffer protection program, this section requires local governments to implement a riparian buffer mitigation program. Implementation of such a program will be beyond the capacity of many local governments in the watershed, especially those that do not already have some buffer program in place. Requirements to assess, document, and supervise buffer mitigation activities must be recognized as a significant burden that would be more efficiently administered by the state. The assumption in the fiscal note that most local governments would not require additional staffing for implementation of this, and the riparian buffer protection provision, is not a view shared by the municipalities within the basin. The \$1.5 million dollar cost estimate in the fiscal note for implementation of a comprehensive buffer protection/mitigation program is likely an order of magnitude too low.

Again, we recommend an incentive-based approach for conversion of this type of program to local government control and oversight.

15A NCAC 02B.0270 – WASTEWATER DISCHARGE REQUIREMENTS

The extension of time for complying with Nitrogen reduction limits from 2011 until 2016 should be preserved. This accommodation is a result of well-founded consideration of the existing capital improvement schedules for point source facilities, and actually moves up the compliance date for Phosphorous removal from 2011 to 2009. Point dischargers across the basin will be operating at the limit of technology for reducing nutrients, and the estimated costs of compliance are significant. In fact, the costs estimated by the fiscal note reveal that local governments will be required to spend at least \$82 million more than they would have for compliance with the Clean Water Responsibility Act (S.L 1997-458). This is not shirking responsibility, but instead constitutes a huge commitment for all dischargers.

Local governments would be making this investment in their wastewater systems despite the fact that point discharges make up only 32% of total Nitrogen and 16% of total Phosphorous loads to the lake. This requirement alone, at a cost of at least \$268 million, constitutes a major regulatory requirement for local governments within the watershed. Combined with all of the other significant requirements in this rule, it would be one of the costliest rulemakings ever for local governments in this state.

Thank you for your consideration of local government concerns. Please do not hesitate to contact me if further explanation will be of assistance in your deliberations.

Sincerely,

John Spurrell
Senior Policy Analyst
NC League of Municipalities

cc: William G. Ross Jr., Secretary
Robin Smith, Assist Sec. for Environment
NC Environmental Management Commission